

WHAT IS CLAIMED IS:

- Sub. A¹
1. An apparatus for baking a substrate comprising:
a hot plate having respective first and second
surfaces;
5 a first recess disposed in the first surface of the
hot plate;
the first recess defined in part by at least one
wall and a bottom;
the first recess having a generally uniform depth
10 defined by the distance between the bottom of the first
recess and the first surface of the hot plate; and
the first recess sized such that at least a portion
of an outer edge of the substrate contacts at least a
portion of the first surface of the hot plate when the
15 substrate is disposed over the first recess.
2. The apparatus of Claim 1 further comprising the
first recess sized such that approximately one tenth of
an inch of the outer edge of the substrate contacts the
20 first surface of the hot plate when the substrate is
positioned to cover the first recess.
3. The apparatus of Claim 1 further comprising the
first recess having a depth between approximately six
25 thousandths of an inch (0.006") to eight thousandths of
an inch (0.008").
4. The apparatus of Claim 1 further comprising the
first recess defined by four walls having approximately
30 equal lengths.

5. The apparatus of Claim 1 further comprising:
a second recess disposed in the second surface of
the plate; and

the second recess defined by at least one wall and
5 having an approximately uniform depth.

6. The apparatus of Claim 1 further comprising the
plate made from silicon carbide (SiC).

10 7. The apparatus of Claim 1 further comprising:
at least one robot access cutout disposed on a first
edge of the plate; and

at least two robot access cutouts disposed on a
second edge of the plate opposite the first edge.

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8. The apparatus of Claim 1 further comprising a
heat source operably coupled to the second surface of the
plate.

20 9. The apparatus of Claim 1 further comprising:
a recess disposed proximate a center region of the
bottom of the first recess; and

the recess disposed within the first recess sized
such that an approximately uniform temperature is
25 achieved at a first surface of the substrate disposed
over the first recess.

10. A system for baking a substrate comprising:
a hot plate having respective first and second
surfaces;

5 a first recess having an approximately uniform depth
defined by a bottom and at least one wall disposed in the
first surface of the hot plate;

a second recess having an approximately uniform
depth defined by a bottom and at least one wall disposed
in the second surface of the hot plate;

10 a heating source operably coupled to the second
112 recess; *2nd surface of plate*

the hot plate operable to maintain the substrate
proximate the first surface such that the first recess is
covered and a portion of a first surface of the substrate
15 is in contact with the first surface of the hot plate
proximate the wall defining the first recess; and

the hot plate further operable to establish an
approximately uniform temperature in the substrate during
baking.

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11. The system of Claim 10 further comprising a
robot mechanism operable to position the substrate on the
hot plate.

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12. The system of Claim 10 further comprising:
a recess disposed in the bottom of the first recess;
and
the recess sized to achieve an approximately uniform
temperature in the substrate during baking.